

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
13 January 2005 (13.01.2005)

PCT

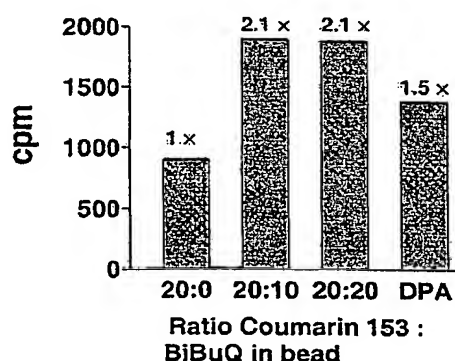
(10) International Publication Number  
**WO 2005/003182 A3**

- (51) International Patent Classification<sup>7</sup>: **G01N 23/00**, 21/76
- (21) International Application Number: PCT/US2004/021639
- (22) International Filing Date: 2 July 2004 (02.07.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/481,052 2 July 2003 (02.07.2003) US
- (71) Applicant (for all designated States except US): **PERKINELMER LAS, INC.** [US/US]; 549 Albany Street, Boston, MA 02118 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BEAUDET, Lucille** [CA/CA]; 115 Sabrevois, Boucherville, Quebec J4B 2H9 (CA). **BOISSONNEAULT, Martin** [CA/CA]; 800 de la Mennais, LaPrairie, Quebec J5R 2R1 (CA). **ROBY, Philippe** [CA/CA]; 66 Coolbreeze app.#8, Pointe-Claire, Quebec H9R 3S5 (CA).
- (74) Agents: **CITKOWSKI, Ronald, W.** et al.; Gifford, Krass, Groh, Sprinkle, Anderson & Citkowski, P.C., 280 N. Old Woodward Ave., Ste. 400, Birmingham, MI 48009 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: SCINTILLATOR COMPOSITION FOR A RADIOASSAY, AND METHOD FOR ITS USE

Effect of BiBuQ on the scintillation of beads  
dyed with Coumarin 153



(57) Abstract: A medium for a scintillation assay includes a fluorescent Coumarin dye, typically having a Stokes shift of at least 50 nm and a fluorescence in the range of 460-500 nm. The composition may further include secondary scintillator materials which as PPO, DPA, bis-MSB, BiBuQ, and the like. The scintillator medium may be a liquid medium or a solid medium. Also disclosed is an assay utilizing the material of the present invention, as well as a specifically solid state scintillator medium incorporating Coumarin 153 and BiBuQ.



**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**(88) Date of publication of the international search report:**

15 September 2005